# Village Power Speech Frank Tugwell

#### Introduction

Good morning distinguished panelists and guests

And thank you Tim for the introduction.

It is both a pleasure and an honor to participate in conference on Village Power and to participate in the important discussion about how to enable the growth of markets for cost-effective rural energy services.

Winrock is pleased to be one of the organizers of the conference, and we appreciate the efforts of our co-sponsors: The World Bank, ESMAP, USAID, NREL, Astro Power, Bergey Wind Power, Honeywell, and Ormat.

Allow me to begin by setting forth the central message of my talk in a very direct fashion:

# Quite simply, the time is right for a new approach.

- Too many people in the world live impoverished lives because of the lack of energy services.
- Too many children struggle to learn by the dim light of kerosene lanterns.
- Too many women and men lack the productivity tools that even modest energy services can bring.
- We can debate about the numbers, but most of us agree that we are speaking of nearly2 billion humans—nearly 1 of every 3 of our kind;

## Again, the time is right to take a new approach

- To set forth an ambitious goal to bring power to these isolated poor.
- To create the conditions whereby commercially viable energy alternatives, provided by private companies and utilities, will flourish to satisfy this unmet demand.
- To build a wide-ranging institutional partnership to accomplish this let's call it the Village Power Partnership--as was recommended by Vice President Shafik in her opening remarks this morning.

## Let me explain why I think the time is right for this ambitious initiative

- Most of us here have worked, in one way or another, with distributed and renewable energy technologies over the years. Indeed, many of us in this room have been colleagues for 2 or three decades—working for a common vision.
- We can remember the days when costs were very high, financing unavailable, and few understood the technologies with which we worked.
- And, we can remember when decision makers dismissed small-scale, distributed energy systems as nonviable and undesirable when compared to development of central power stations and the reach of wires through traditional rural electrification programs programs almost always, by the way, heavily subsidized.

## Three things have changed this picture

- **First**, we understand technical alternatives very well, and are better prepared to make smart choices about them.
- **Second**, and this is critical, we have learned to think about energy services in a new way.
- Third, we have a solid understanding of the policy and institutional obstacles that stand in the way of distributed provision of energy services.
- A quick glance at the excellent panels and presentations at this meeting will make clear just how far along we have come....

### Allow me to say a few words about each of these elements......

#### Consider the technologies first

- At Winrock, we have been working for more than a decade, on the ground, to match technology solutions with local needs. Our goal has always been to promote costeffective means of delivering energy services that increase local incomes while protecting the environment.
- We have worked with a wide range of renewable energy systems including biomass -whose power has been used for a broad range of applications -wind, solar, small geothermal and small hydro.
- As a result of our efforts, and those of many others, hundreds of thousands of systems are in operation today. In recent months I have seen and used them in places as diverse as rural Brazil and remote areas of Mali
- You can see the faces of some of our partners in the collage on the screen.

- Our experience with these systems has given us a good grasp of how to discover the true costs of services, and how to compare them with alternatives.
- We are very aware that there are hundreds of millions of people who are paying a very high price for poor quality, environmentally damaging energy services
- We understand how small companies can deliver energy services to make a profit in this market, and how critical financing is to these efforts. Successful pilot programs are leading the way. All of us in this room know about one or more of these, I am sure.
- Now we must move beyond the pilots—and this is where the challenge becomes more difficult.

In order to make informed judgments about energy alternatives — and help others make informed judgments — we must reconceptualize our analytical apparatus concerning energy decisions.

- We must focus on distributed, modular, smaller scale systems that deliver, not kilowatt hours, but energy services. And we must do so for systems that are diverse, complex, and by necessity tailored to particular sites.
- In short, those of us working in the field of rural energy delivery—whether in the public sector, the private sector, or in the NGO world--all must learn to make smart energy choices using a different calculus.
- Again and again when we undertake this exercise, we discover that distributed power is often very cost-effective. Unfortunately, few are trained to do this, and few institutions are willing to begin.

Second, and this is critical, we have learned to think about the importance of energy services in a new way.

- Energy services have a special connection to economic growth. In rural communities this connection can be extraordinary.
- We have seen and measured the results, the impact of energy on people's lives especially on the lives of women and children, allowing them to invest their time and resources more productively.
- We have long known that here is a relationship between energy services and malnutrition, illiteracy, and unhealthy living conditions. What we have not accepted is that energy can, in fact, serve as a critical catalyst of development. Its role is often causal, rather then simply a result of growth.

- Clean energy services can empower the poor by helping them create wealth.
- Accordingly, we must begin to think of energy services as part of a development package. Energy is <u>not a separate sector</u>, but should be an integral part of the thinking of <u>every sector</u>.

# Third, we understand the obstacles in a way we did not when we started

- It is increasingly clear that patience is running out with the unmet promises of the old approach of building more central station plants and extending the grid.
- We remain frustrated by the stark fact that nearly 2 billion people remain without energy services. Despite enormous investments by the public and private sectors, there are more people without electricity today than there were 10 years ago and the gap continues to increase.

# Before we can make significant progress on the goals of this meeting, we will need to continue to press for three broad changes—most of these are quite familiar to you

- First, we need policy and regulatory frameworks that encourage distributed power systems, renewable energy, and energy efficiency. Frameworks, first and foremost, that reduce and eliminate subsidies for large-scale, fossil fuel systems.
- Second, we need integrated development planning that treats least-cost energy services as an integral part of effective development activities.
- Third, we need financial mechanisms able to respond to the complicated challenge of providing credit to small, distributed, modular energy supply systems.

Addressing these obstacles is a challenge for all of us in this room today—I know many of you have been thinking about them for decades.

#### Conclusion

# Le me return now to the central theme of this presentation:

- It is time for a change; we have been meeting for many years; its time to do more
- We understand the possibilities, we understand the obstacles

- The timing is particularly appropriate
- Private and public investment in central station power systems has slowed and will
  not resume quickly; financing for giant systems is scarce; fuel prices are high and
  may increase further in the near term
- We have a growing understanding among major institutions that locally delivered energy services — Village Power — must be considered part of the successful development package — it is inherently cross sector in character.

# Accordingly, I challenge all of us to take up the partnership concept, presented earlier in this meeting

### We need to form a powerful VILLAGE POWER PARTNERSHIP

- A partnership made up of governments, the private sector, NGOs and international institutions
- A partnership that can: identify linkages between investments in energy and rural development, develop models for implementation, and catalyze investments.
- A partnership that can benefit from the knowledge and expertise of those in other sectors—in agriculture, rural development, health, and education.
- And a partnership that can create an enabling environment for genuine private enterprise to satisfy this pressing global need.

Let me be so bold as to suggest that we set, as a 10-year objective for this partnership, the goal of bringing clean energy services to 500 million people who live without them today. (this would mean only 25% of those without power today).

500 million people with clean energy services. In ten years.

### We should be able to achieve this, but it won't be easy:

- We will need to identify cooperating countries that seek to increase rural access to clean energy by creating an enabling policy and institutional environment.
- We will need to find creative ways to support these countries with technical assistance, policy support, and credit from the World Bank Group, regional banks, bilateral donors, foundations, NGO's and the private sector.
- We will need to create mechanisms for enhanced cooperation among countries and institutions joining the Partnership

- And we will need to carefully monitor and evaluate progress, including increases in productivity, income, and quality of life for the poor.
- Our next Village Power Conference, let me suggest, should be one in which our job is to see how far we have come in responding to the challenge that is so clear to us today.

For those interested in being part of this partnership, the theme will be discussed further in the Wrap Up session tomorrow by Ms. Leautier, Director of Infrastructure, here at the Bank.

All of us at Winrock look forward to working with you on this most important effort.